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LETTER TO THE EDITOR OPEN ACCESS

Supporting Patient-Centred Decisions on Gene Therapy for Haemophilia A: A Conceptual Model

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To the Editor,

The emergence of gene therapy for Haemophilia A (HA) represents a significant therapeutic milestone. By offering a potential one-time treatment that restores endogenous factor VIII production, gene therapy introduces new hope—yet also new complexities—for people with haemophilia (PWH) and their care teams. This is not a decision to be taken lightly. The long-term consequences, the absence of re-treatment possibilities and the evolving evidence base require a shared and carefully navigated path forward between clinicians and patients [1].

To support this process, we developed a conceptual shared decision-making (SDM) tool designed specifically for the Italian context. This tool was created by a multidisciplinary Expert Advisory Board comprising haematologists from different regions of Italy, a psychologist, a linguist, a methodology expert and representatives of national patient organizations. The group brought together diverse scientific, clinical and experiential perspectives to design a flexible framework capable of fostering dialogue, reflection and informed choice in the context of gene therapy.

The tool is structured into three sequential but adaptable components. The first—Role Definition—supports clinicians in understanding how much involvement the person with haemophilia desires in the decision-making process. For instance, patients are invited to reflect on whether they wish to lead, share or delegate decisions about their treatment. However, even in cases where patients prefer a less active role, the tool encourages clinicians to maintain open, respectful and reciprocal dialogue. Informed participation is not optional—it is a prerequisite to ethical care, particularly when the decision involves an irreversible therapeutic choice [2].

The second component, Agenda Alignment, guides the conversation towards what truly matters to the patient. It offers structured prompts to explore individual priorities such as the desire for greater independence from hospital visits, freedom to travel, engagement in work or physical activities and reduction of treatment-related burdens. At the same time, it allows space for patients to voice doubts, hesitations or concerns that may not emerge spontaneously in standard clinical interactions. This phase is critical to ensuring that medical decisions are integrated with personal goals, daily life demands and psychosocial well-being [3].

The final component, Intention Setting, facilitates reflection on the patient's evolving position. Patients are encouraged to

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consider and articulate whether they feel ready to proceed with gene therapy, prefer to wait or are still undecided. This component is not about driving towards a particular choice, but rather about recognizing and legitimizing the full range of possible decisions—each of which can be appropriate, provided it is well-informed and aligns with the individual's values [4].

Throughout, the SDM process is iterative and non-linear. It can unfold over multiple appointments, involving family members, peers or patient advocates when appropriate. The goal is not persuasion, but preparation—ensuring that PWH can understand the implications of gene therapy, reflect on their own goals and engage in a balanced conversation with their healthcare providers.

What distinguishes this tool from others currently available is its explicitly dialogic structure, designed to activate both cognitive and emotional engagement. While a number of valuable decision aids for haemophilia exist—including those developed by international organizations and academic centres—most focus on information provision. Our model, by contrast, seeks to scaffold collaborative reflection, while remaining sensitive to cultural and linguistic nuances specific to Italy [5].

We recognize that this tool, in its current form, is conceptual and focused specifically on gene therapy. Its future development must include the integration of evidence-based information on risks, efficacy, and long-term outcomes. As the therapeutic landscape expands, with new rebalancing agents and personalized prophylactic regimens emerging [6], it will be important to evolve the framework to support more complex, comparative decision-making processes [7].

Ultimately, the tool we propose does not aim to increase the uptake of any particular therapy. It aims to ensure that every person with haemophilia is empowered to choose—freely, informedly and in dialogue with those who care for them. Gene therapy may be transformative, but only when pursued through a shared and transparent process can it truly serve the needs and hopes of the people it intends to benefit [8, 9]. We hope this work contributes to ongoing efforts to centre the voices of persons with haemophilia in treatment decisions—not as passive recipients of care, but as active partners in shaping their therapeutic journey [10].

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Ethics Statement

The authors have nothing to report.

Conflicts of Interest

G.D.M. was a speaker or a member of a speaker bureau for BioMarin and CSL Behring, and was an *ad-hoc* speaker/consultant for BioMarin and CSL Behring. S.Bi. and S.Ba. have acted as consultants for BioMarin. E.F.G. participated in speakers' bureaus on behalf of a patient organisation for BioMarin, CSL Behring, Novo Nordisk, Roche and Sobi; participated in advisory boards on behalf of a patient organisation for BioMarin, Pfizer, Roche and Sobi; and participated in patient councils on behalf of a patient organisation for BioMarin, Novo Nordisk and Roche. M.F. has no competing interests to declare. M.F.M. has acted as a consultant and discussant for BioMarin, Novo Nordisk, Roche and Sobi. M.N. has acted as a consultant for Bayer, Novo Nordisk, Amgen and CSL Behring, and received speaker fees from CSL Behring, Novo Nordisk, Bayer, Sobi, Amgen, Novartis, Sanofi Genzyme and Takeda. R.C.S. has acted as a consultant for Bayer, Novo Nordisk, Sobi, Roche and Takeda, and received speaker fees from Bayer, BioMarin, CSL Behring, Novo Nordisk, Kedrion, Roche, Sobi and Takeda. G.C. received payment or honoraria for lectures, presentations, speakers' bureaus or educational events from Bioviiix, CSL Behring, Biomarin, Sanofi, Novo Nordisk, Takeda, LFB, Roche and SOBI, and participated on a Data Safety Monitoring Board or Advisory Board for Bayer, CSL Behring, Biomarin, Pfizer, Sanofi, Novo Nordisk, Takeda, LFB and Roche.

Data Availability Statement

Data sharing does not apply to this letter as no datasets were generated or analysed during the current study.

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